

CHAPTER 5: ENVIRONMENTAL MANAGEMENT ISSUES

5.1 Energy Requirements and Conservation Potential of the Alternatives and Mitigation Measures

The alternatives are distinguished by the amount and/or locations of bottomfish fishing in the MHI. The vessels used to target bottomfish consume energy in the form of petroleum-based fuels and electricity. None of the alternatives are expected to result in the consumption of significant amounts of energy.

5.2 Natural or Depletable Resource Requirements and Conservation Potential of the Alternatives and Mitigation Measures

Except for the no-action alternative, all of the alternatives are designed to reduce fishing effort on Hawaii's bottomfish stocks by at least 15 percent from 2003 levels.

5.3 Urban Quality, Historic and Cultural Resources, and Design of the Built Environment Including the Reuse and Conservation Potential of the Alternatives and Mitigation Measures

None of the alternatives would have an appreciable effect on urban quality or design of the built environment because of the small size of the bottomfish fishing fleet and its shore-side supporting infrastructure.

5.4 Possible Conflicts between the Proposed Action and Other Land Use Plans

The preferred alternative considered in this EIS does not conflict with the objectives nor provisions of the NWHI Coral Reef Ecosystem Reserve or the proposed NWHI sanctuary process because the existing FMP provides for a sustainable fishery with little bycatch and minimal effect on protected species or ecosystem integrity.

5.5 Adverse Impacts That Cannot Be Avoided

None of the alternatives propose measures that produce unavoidable adverse impacts.

5.6 The Relationship Between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

With the exception of Alternative 1 (no action), all of the alternatives considered are designed to reduce fishing pressure on Hawaii's bottomfish stocks. The objective of reducing fishing effort in the MHI is to enhance the long-term productivity of Hawaii's bottomfish populations.

5.7 Irreversible and Irretrievable Commitments of Resources Involved in the Proposed Action

Nonrenewable resources consumed in the industry include the energy used in fishing operations and ancillary businesses, as well as the materials used to construct the physical assets used in the industry, although some of the latter would be available for reuse if taken out of use in bottomfish fishing.

5.8 Permits, Licenses, and Approvals Necessary to Implement the Proposed Action

No permits outside purview of the NMFS and State of Hawaii HDAR are required for this action. However, besides Alternative 1 (no-action) and Alternative 2a (closure of Penguin and Middle Banks) the remaining alternatives require close coordination between NMFS and the State of Hawaii as well as parallel regulations in order for successful implementation and enforcement. Close coordination involves data sharing agreements (which already exist), developing appropriate research and monitoring plans, as well as entering into Joint Enforcement Agreement.